AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1.   (Currently Amended)   A method of authentication and authorization support for Mobile IP version 6 (MIPv6) in a CDMA system, the method comprising the steps of:

transferring, between a mobile node in a visited network and a home network of the mobile node, MIPv6-related authentication and authorization information;

wherein the transferring step is performed in an authentication protocol; and

wherein the transferring step is performed in an end-to-end procedure transparent to the visited network over an AAA Authentication, Authorization, and Accounting (AAA) infrastructure.

2.   (Canceled)

3.   (Previously Presented)   The method of claim 1, wherein the end-to-end procedure is executed between the mobile node and an AAA server in the home network, and nodes in the visited network act as mere pass-through agents in the end-to-end procedure.

4.   (Previously Presented)   The method of claim 3, wherein the MIPv6-related information is transferred in the authentication protocol between the mobile node and the AAA home network server via an internetworking access server located in the visited network.

5.   (Canceled)

6. (Previously Presented) The method of claim 4, wherein point-to-point communication between the mobile node and the internetworking access server is configured based on the CSD-PPP protocol.

7. (Canceled)

8 (Currently Amended) The method of ~~claim 2~~ claim 1, wherein the authentication protocol is an extended Extensible Authentication Protocol (EAP) and the MIPv6-related authentication and authorization information is incorporated as additional data in the EAP protocol stack.

9. (Canceled)

10. (Previously Presented) The method of claim 8, wherein the MIPv6-related information is transferred in a generic container attribute available for any EAP method.

11. (Previously Presented) The method of claim 8, wherein the MIPv6-related information is transferred in a method-specific generic container attribute of the method layer in the EAP protocol stack.

12-14. (Canceled)

15. (Previously Presented) The method of claim 1, wherein said method further comprises the step of performing, for the purpose of MIPv6 hand-in, CHAP authentication between the mobile node and the home network.

16-17. (Canceled)

18.   (Previously Presented)   The method of claim 1, wherein the MIPv6-related information is transferred over the AAA infrastructure for allocation of a home agent, for establishing a MIPv6 security association between the mobile node and the home agent and for establishing a binding for the mobile node in the home agent.

19.   (Canceled)

20.   (Previously Presented)   The method of claim 4, wherein the internetworking access server offers the mobile node the possibility to use PPP or CSD-PPP by sending out a standard PPP/LCP packet and at least a PPP/EAP packet.

21-22. (Canceled)

23.   (Previously Presented)   The method of claim 20, wherein the internetworking access server also sends out a PPP/CHAP packet together with the PPP/LCP and PPP/EAP packets.

24-26. (Canceled)

27.   (Currently Amended)   A system for authentication and authorization support for Mobile IP version 6 (MIPv6) in a CDMA system, comprising:
    means for transferring between a mobile node in a visited network and a home network of the mobile node, MIPv6-related authentication and authorization information, said transferring means including:
    [[in]] an authentication protocol; and
    means for transferring the information in an end-to-end procedure transparent to the visited network over an AAA Authentication, Authorization, and Accounting (AAA) infrastructure.

28.   (Canceled)

29. (Previously Presented) The system of claim 27, wherein the end-to-end procedure is between the mobile node and an AAA server in the home network, and nodes in the visited network act as mere pass-through agents in the end-to-end procedure.

30. (Previously Presented) The system of claim 29, wherein the MIPv6-related information is transferred in the authentication protocol between the mobile node and the AAA home network server via an internetworking access server located in the visited network.

31. (Canceled)

32. (Previously Presented) The system of claim 30, further comprising means for configuring point-to-point communication between the mobile node and the internetworking access server based on the CSD-PPP protocol.

33. (Canceled)

34. (Previously Presented) The system of claim 27, wherein the authentication protocol is an extended Extensible Authentication protocol (EAP) and the MIPv6-related authentication and authorization information is incorporated as additional data in the EAP protocol stack.

35. (Canceled)

36. (Previously Presented) The system of claim 34, wherein said means for transferring MIPv6-related information comprises means for transferring the MIPv6-related information in a generic container attribute available for any EAP method.

37.   (Previously Presented)   The system of claim 34, wherein said means for transferring MIPv6-related information comprises means for transferring the MIPv6-related information in a method-specific generic container attribute of the method layer in the EAP protocol stack.

38-40. (Canceled)

41.   (Previously Presented)   The system of claim 27, wherein said system further comprises means for performing, for the purpose of MIPv6 hand-in, CHAP authentication between the mobile node and the home network.

42.   (Canceled)

43.   (Previously Presented)   The system of claim 27, wherein said means for transferring MIPv6-related information is operable for transferring the MIPv6-related information over the AAA infrastructure for allocation of a home agent for establishing a MIPv6 security association between the mobile node and the home agent, and for establishing a binding for the mobile node in the home agent.

44-45. (Canceled)

46.   (Previously Presented)   The system of claim 30, wherein the internetworking access server (22) is operable for offering the mobile node the possibility to use PPP or CSD-PPP by sending out a standard PPP/LCP packet and at least a PPP/EAP packet.

47-48. (Canceled)

49.   (Previously Presented)   The system of claim 46, wherein the internetworking access server is operable for sending out a PPP/CHAP packet together with the PPP/LCP and PPP/EAP packets.

50-52. (Canceled)

53.   (Currently Amended)   A system for Mobile IP version 6 (MIPv6) hand-in within a CDMA framework, ~~characterized by~~ <u>said system comprising:</u>

means for performing ~~CHAP~~ <u>a Challenge Handshake Authentication Protocol (CHAP)</u> authentication <u>procedure</u> between a mobile node in a visited network and an AAA server in a home network of the mobile node over an AAA infrastructure<u>;</u>

<u>wherein nodes in the visited network act as mere pass-through agents in the CHAP procedure</u>.

54-57. (Canceled)